User's Guide for the Polycom PowerCam Presenter

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About this Guide

This guide introduces you to the Polycom® PowerCam Presenter™, explains how to configure the system, describes how to use automatic camera tracking and other functions, and provides maintenance and troubleshooting information. This guide is intended for all users of the Polycom PowerCam Presenter.

For additional information about the Polycom PowerCam Presenter, refer to these other documents:

- *Setting up the Polycom PowerCam Presenter*, which illustrates how to set up the controller with and without a Polycom VSX™ video conferencing system, how to set up the locator pack assembly, and how to set up the camera. This document is shipped in hardcopy format with the PowerCam Presenter.
- *Polycom PowerCam Presenter Release Notes*, which describes PowerCam Presenter features and lists feature limitations and usage notes. This document is available through the documentation CD that is shipped with the PowerCam Presenter.

You can also find these documents, as well as additional Polycom documentation, at the Polycom web site, www.polycom.com/videodocumentation.

For support or service, please contact your Polycom distributor or go to Polycom Support at www.polycom.com/support.

Contents

1 Introducing the Polycom PowerCam Presenter 1-1

System Components 1-2
Key Features 1-6
Ease of Use 1-6
State-of-the-Art Technology 1-6

2 Using the Polycom PowerCam Presenter 2-1

Setting up the Hardware 2-1
Using the Remote Control 2-2
Configuring User Settings 2-3
Configuring Camera Settings 2-3
Configuring Input Signal, Camera Direction, and Backlight Compensation 2-3
Configuring the Camera Tracking Area 2-4
Calibrating the Camera 2-7
Calibrating for Pointing Accuracy 2-7
Calibrating for Background Noise 2-7
Configuring LAN Properties 2-8
Configuring Video Output Settings 2-9
Using Automatic Camera Tracking 2-10
Enabling and Disabling Automatic Camera Tracking 2-11
Setting and Using Presenter Views 2-12
Enabling and Disabling Automatic Zooming 2-14
Controlling the Camera Manually 2-15
Setting and Using Camera Presets 2-15
Obtaining System Information 2-16
Tips on Using the Polycom PowerCam Presenter 2-16

3 Maintenance and Troubleshooting 3-1

Maintaining the System 3-1
Charging the Locator Pack Batteries 3-1
Upgrading the Software 3-2
Automatic Camera Tracking Specifications 3-2
Troubleshooting the System 3-4
Power and Hardware Issues 3-4
Camera Movement Issues 3-6
Contacting Technical Support 3-9

Safety and Regulatory Notices . . . .Safety and Regulatory Notices-1

Index Index-1

1

Introducing the Polycom PowerCam Presenter

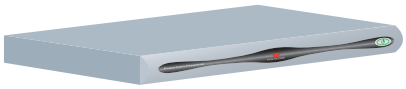
The Polycom PowerCam Presenter is an automatic camera tracking device. Its primary components include a camera, a locator pack assembly, a controller, and a remote control.

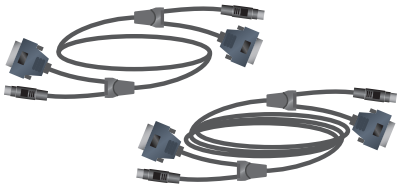
When you have set up the PowerCam Presenter and are ready to use the automatic camera tracking functionality, simply attach the locator pack assembly to yourself using the provided belt clip or lanyard. You can then freely move about the room, and the camera will automatically point at you. Because you no longer need to confine yourself to a single spot in the room or worry about adjusting the camera manually, you'll be free to focus on the more important tasks at hand — whether that's teaching a class, making a presentation, or delivering a speech.

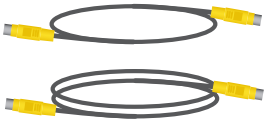
The PowerCam Presenter also enables you to manually adjust the camera. You can pan, tilt, and zoom the camera as well as set up one or two camera preset positions.

System Components

These standard components come with the Polycom PowerCam Presenter:

Name	Component	Description
Controller		The controller receives ultrasound signals from the camera. The software in the controller processes these signals to locate the person wearing the locator pack assembly, and it then commands the camera to follow that person.
Locator pack assembly (includes locator pack and locator)		The locator pack assembly generates ultrasound signals. The camera receives these signals, which enables it to track you as you move. You clip the locator and locator pack to the front of your clothing, or you can wear the locator pack around your neck using the provided lanyard.
Locator pack AC power charger and cord		The locator pack AC power charger and cord enable you to charge the battery pack inside the locator pack. Connect the power charger and cord to each other before connecting them to the locator pack or to the wall. **NOTE**: For important information about charging the locator batteries, refer to Charging the Locator Pack Batteries on page 3-1.
Battery pack		The battery pack provides power to the locator pack. **NOTE**: For important information about charging the locator batteries, refer to Charging the Locator Pack Batteries on page 3-1.
Lanyard		The lanyard, like the belt clip, enables you to keep the locator pack assembly with you at all times without having to carry it in your hands. The lanyard goes around your neck.
Belt clip		The belt clip, like the lanyard, enables you to keep the locator pack assembly with you at all times without having to carry it in your hands. The belt clip clips to your belt or to the waistband of your clothing.

Name	Component	Description
Camera (NTSC or PAL version)		The camera has several main functions: • Provides an S-video (PAL or NTSC) or composite video signal. • Points the camera head in response to commands from the controller to change the pan, tilt, or zoom. • Provides a microphone array, which sends the ultrasound signals received from the locator pack assembly to the controller box. • Provides an IR receiver, which sends the IR signals received from the remote control to the controller.
Camera cables		In a configuration where you are not using a VSX video conferencing system, the camera cable connects to the camera. In a configuration where you are using a VSX video conferencing system, one camera cable connects to the camera and the other connects to the VSX system. In either configuration, you can use the 10-foot or 100-foot cable interchangeably.
Camera adapter cable		In a configuration where you are using a VSX video conferencing system, the camera adapter cable enables you to connect both the camera and the VSX system to the controller.
Camera power supply and power cable		The camera power supply and power cable connect power to the camera.
Controller power cable		The controller power cable connects power to the controller. Your PowerCam Presenter shipping boxes contain power cables for various countries; use the cable that's appropriate for your country.
LAN cable		The LAN cable enables you to connect your PowerCam Presenter to an IP network. The LAN connection is *not* for making video calls.

Name	Component	Description
S-video cables		In a configuration where you are not using a VSX video conferencing system, the 25-foot S-video cable enables you to connect optional S-video devices, such as a VCR, DVD recorder, or a video conferencing system other than a Polycom VSX system. In a configuration where you are using a VSX video conferencing system, the 25-foot S-video cable enables you to connect the camera to the controller. In either configuration, the 8-foot S-video cable enables you to connect a display so you can see Presenter icons and messages.
S-video to RCA adapter		If you are using your own RCA cable to connect to a display, the S-video to RCA adapter connects your RCA cable to the controller so you can see PowerCam Presenter icons and messages on the screen.
Male RCA to female S-video adapter		In a configuration where you are not using a VSX video conferencing system, the male RCA to female S-video adapter connects the camera cable to the camera. In a configuration where you are using a VSX video conferencing system, the male RCA to female S-video adapter connects the S-video cable to the camera.
S-video gender changer adapter		In a configuration where you are using a VSX video conferencing system, the S-video gender changer adapter connects the two camera cables.
Rack mount ears and screws		The rack mount ears and screws enable you to mount the controller in a rack. For information on how to do this, refer to the *Administrator's Guide for the VSX Series*, available at www.polycom.com/videodocumentation.
Rubber feet		The rubber feet insert into the holes in the bottom of the controller. Use the rubber feet only if you choose to place the controller on a desk or table rather than to rack mount it.

Name	Component	Description
Remote control and batteries		The remote control sends IR signals to the camera, which enable you to operate the system. Color-coded buttons correspond to common tasks. Insert the batteries in the remote control as instructed on the remote control battery compartment.
Documentation		• *Setting up the Polycom PowerCam Presenter* • Polycom PowerCam Presenter documentation CD

You may also add optional components to your PowerCam Presenter. For example, you can add:

- A Polycom VSX video conferencing system
- A (non-VSX) video conferencing system
- A VCR or DVD player
- A display

If you connect the PowerCam Presenter to a Polycom VSX system, the PowerCam Presenter camera can be the main or auxiliary camera, and you can continue to use the automatic camera tracking functionality. The PowerCam camera will also work with any other video conferencing equipment that accepts a standard NTSC or PAL video signal as input; however, it cannot be controlled from that other equipment (for example, you will not be able to pan, tilt, or zoom the camera).

For information about purchasing optional equipment, please contact your Polycom distributor.

Key Features

This section lists the key features of the Polycom PowerCam Presenter.

Ease of Use

- Fluid camera movement that follows the presenter's walking speed and smoothly stops moving when the presenter stops walking.
- The presenter can be spontaneous and focus on the task at hand instead of focusing on how to manually control the camera.
- The remote control enables the presenter to quickly and efficiently use camera tracking without having to learn new user interfaces.
- Automatically zooms in and out as the presenter walks close to or away from the camera.
- Customizable automatic camera tracking views (for example, track to the left or right of the presenter to leave space for a whiteboard).
- Stores up to two camera presets.
- The locator can be clipped onto a shirt or pocket or can be used with the provided lanyard.
- Ideal for all school levels, corporate and government training, lectures, boardrooms, legal environments, and medical education.

State-of-the-Art Technology

- Works with any video conferencing system or video capture device that has an S-video or composite input.
- Creates perfect line-of-sight and eye contact with the presenter and audience.
- Eight-hour battery usage and three-hour battery charge time (your results may vary).
- Fast and quiet camera movement.
- Does not require microphone cables, mats, or wired detection devices.
- No interference with radio frequency devices or signals.

2

Using the Polycom PowerCam Presenter

This chapter provides guidelines for setting up the hardware, describes the remote control, and explains how to configure the Polycom PowerCam Presenter. Information about how to use automatic camera tracking, control the camera manually, set camera presets, and obtain system information is also included. Tips on how to get the best results when using the Polycom PowerCam Presenter are provided at the end of this chapter.

Setting up the Hardware

To properly set up the PowerCam Presenter hardware, refer to the *Setting up the Polycom PowerCam Presenter* document, which you received with your system. This document is also available at www.polycom.com/videodocumentation.

Keep the following guidelines in mind when setting up the hardware:

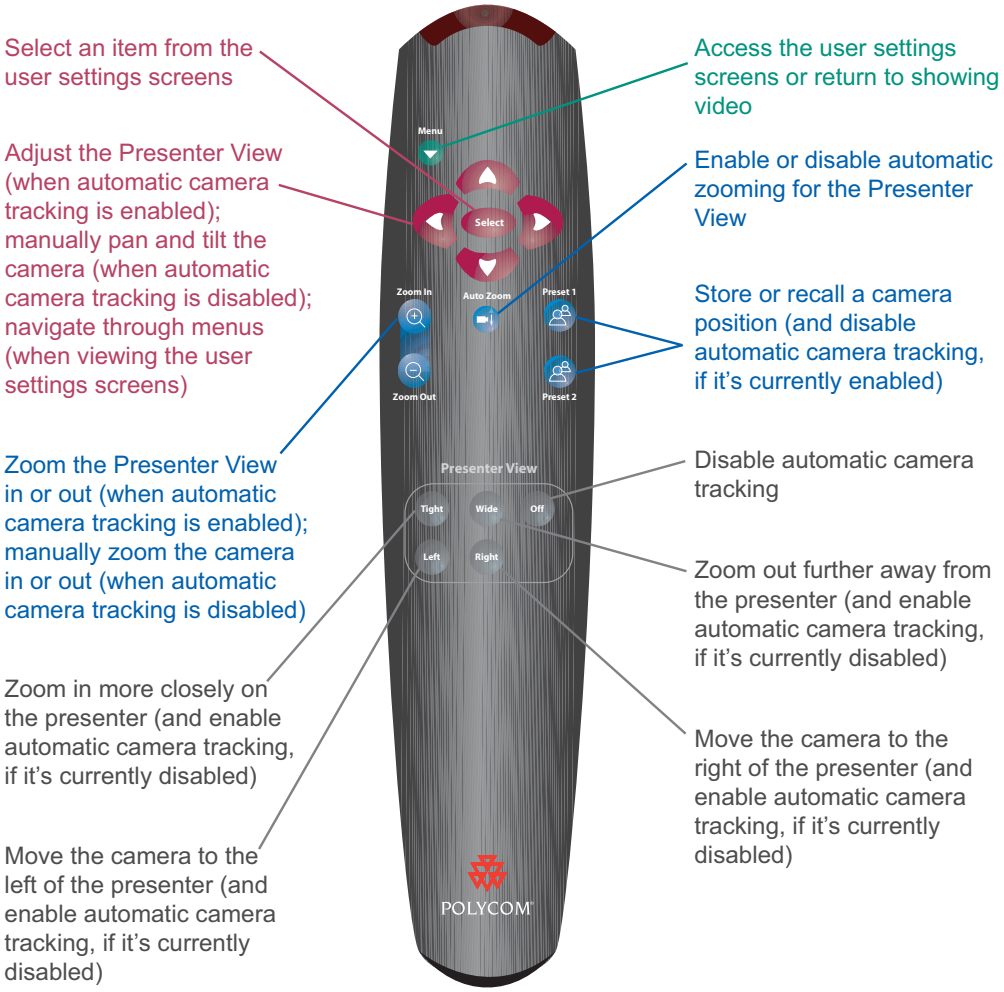
- Connect the cables precisely as shown on the *Setting up the Polycom PowerCam Presenter* document. If you change the way the system is cabled or use different cables, adapters, or connectors, you may experience video delay and lip synchronization issues.
- As shown on the *Setting up the Polycom PowerCam Presenter* document, you cable the system differently depending on whether or not you have a Polycom VSX video conferencing system connected to the PowerCam Presenter. Be sure to follow the cabling diagram that pertains to your particular system configuration.
- The video used for presentations, video conferencing, and recording comes directly from the camera, whereas the video used for the user interface and system feedback appears on a separate display connected to the controller.

  Therefore, if you want to view the user settings screens and see icons and messages from the system, you must connect a separate display to connector 1 on the controller.

- You can connect a display to connector 1 on the controller using S-video or composite; however, be sure to use whichever matches the display's video input.
- Polycom recommends that you do not use audio with the display connected to connector 1 on the controller. If you do so, you will experience video delay and lip synchronization issues.

Using the Remote Control

The IR remote control enables you to control the PowerCam Presenter. You can use it to enable and disable automatic camera tracking, adjust the camera, and navigate the screens.


Select an item from the user settings screens
Adjust the Presenter View (when automatic camera tracking is enabled); manually pan and tilt the camera (when automatic camera tracking is disabled); navigate through menus (when viewing the user settings screens)
Zoom the Presenter View in or out (when automatic camera tracking is enabled); manually zoom the camera in or out (when automatic camera tracking is disabled)
Zoom in more closely on the presenter (and enable automatic camera tracking, if it's currently disabled)
Move the camera to the left of the presenter (and enable automatic camera tracking, if it's currently disabled)
Access the user settings screens or return to showing video
Enable or disable automatic zooming for the Presenter View
Store or recall a camera position (and disable automatic camera tracking, if it's currently enabled)
Disable automatic camera tracking
Zoom out further away from the presenter (and enable automatic camera tracking, if it's currently disabled)
Move the camera to the right of the presenter (and enable automatic camera tracking, if it's currently disabled)
Menu
Select
Zoom In
Auto Zoom
Preset 1
Zoom Out
Preset 2
Presenter View
Tight
Wide
Off
Left
Right
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Keep in mind that the **Tight**, **Wide**, **Left**, and **Right** button settings described here are merely guidelines, and that you can set and change the settings to best suit your needs. For more information, refer to Setting and Using Presenter Views on page 2-12.

When the message Remote control batteries are low appears on the screen, you need to replace the batteries.

Configuring User Settings

The **Menu** button on the remote control gives you access to the user settings. These settings enable you to configure and calibrate the camera, set LAN properties, and specify video output settings.

Configuring Camera Settings

The Camera Settings screen lets you specify the settings for the input signal, backlight compensation, camera direction, and the camera tracking area.

Configuring Input Signal, Camera Direction, and Backlight Compensation

You may need to set or change these camera settings depending on your preferences and on the environment in which you use your PowerCam Presenter.

To configure the settings for input signal, camera direction, and backlight compensation:

1. Press **Menu** on the remote control.
2. Select **Camera Settings** from the PowerCam Presenter screen.
3. Configure these settings:

Setting	Description
Input Signal	Specifies your camera's input signal: • Select **S-Video** if you connect your camera to the PowerCam Presenter controller using the S-video connector on the camera. • Select **Composite** if you connect your camera to the PowerCam Presenter controller using the composite connector on the camera.

Setting	Description
Camera Direction	Specifies the direction the camera moves when using the arrow buttons on the remote control.
Backlight Compensation	Specifies whether to have the camera automatically adjust for a light background. Backlight compensation is best used in situations where the subject appears darker than the background.

Configuring the Camera Tracking Area

The camera tracking area is the area within which automatic camera tracking will follow the locator. How you choose to set the tracking area depends on a number of factors including the size of your room, whether your room contains many, few, or no reflective surfaces (such as windows, large plasma screens, or shiny walls), whether you plan on remaining in a certain part of the room or you need to walk to all parts of the room, and so forth.

For example, suppose you are presenting in a classroom that has many windows, a few large, shiny tables, and a big plasma screen. Because of the many reflective surfaces, the camera may inadvertently point at these reflective surfaces instead of pointing at you, the presenter. If you know that you will be standing at the front of the classroom throughout the presentation, then you could set the tracking area so that it is limited to the front of the classroom. In this way, you can eliminate the windows, tables, and screen from the tracking area and know that the camera will never inadvertently point to them, but will always point to you instead.

Note

If your room has many reflective surfaces that the camera tends to point to, consider reducing the reflections. You could, for example, cover the windows with drapes, cover the tables with tablecloths, or treat the side walls to avoid acoustic echoes. You may also want to try moving the camera to another location in the room, or simply try to avoid the part of the room where the camera has difficulty locating you.

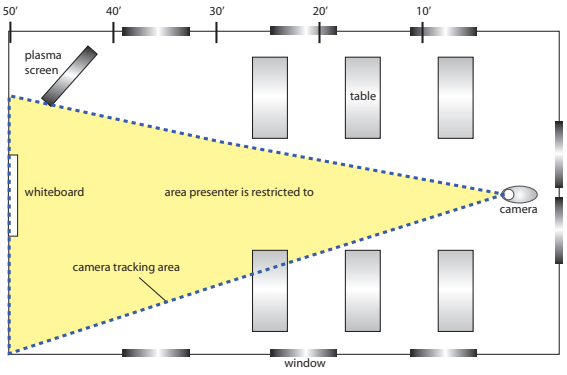
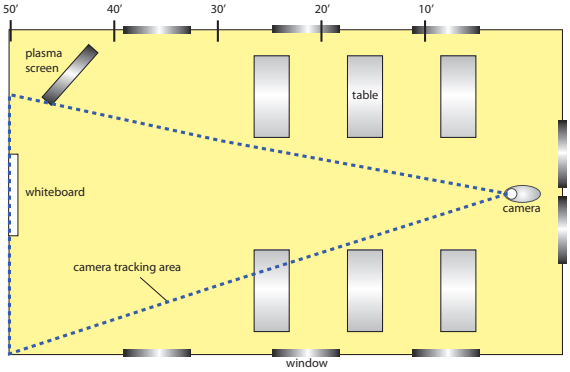
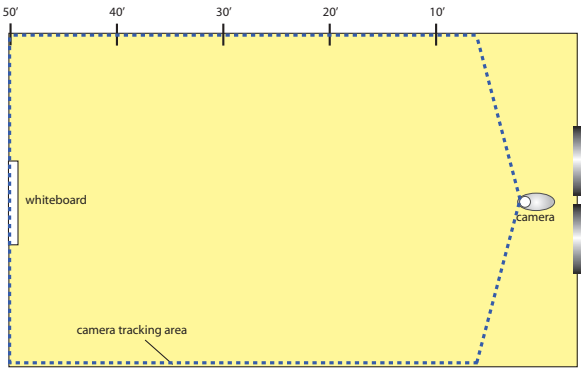
To configure the camera tracking area:

1. Press **Menu** on the remote control.
2. Select **Camera Settings** from the PowerCam Presenter screen.

3. In the **Tracking Area** field, select **Restricted**, **Unrestricted**, or **Not Specified**.

Refer to the following table for help in determining which setting is best for your situation:

	Restricted	**Unrestricted**	**Not Specified**
Setup	Requires you to set up the tracking area.	Requires you to set up the tracking area.	Does not require any setup.
Tracking area	Camera will not point to anything outside the tracking area, even if the presenter walks out of the area.	Camera will point outside the tracking area if the presenter walks out of the area; however, it will not point to reflections from outside the tracking area. Note that the camera will not follow the presenter if the signal was lost inside the tracking area and then recovered outside the tracking area.	Camera will point wherever it picks up a signal since no tracking area is specified.
Ability to handle reflective surfaces, such as windows, large plasma screens, or shiny walls	Camera will not point to reflective surfaces outside the tracking area, but is still susceptible to pointing to reflective surfaces inside the tracking area.	Camera will not point to reflective surfaces outside the tracking area, but is still susceptible to pointing to reflective surfaces inside the tracking area.	Camera is susceptible to pointing to reflective surfaces.
Recom-mended usage	Use when you want to exclude reflective surfaces from the tracking area, and the presenter can be limited to a restricted area.	Use when you want to exclude reflective surfaces from the tracking area, but you do not want the presenter to be limited to a restricted area.	Use when there are no or minimum reflective surfaces or you are in an open space. This is the default option.

	Restricted	Unrestricted	Not Specified
Sample rooms	Restricted  Unrestricted  Not specified 		

4. If you selected **Unrestricted** or **Restricted**, press **Next** to access the Tracking Area screen.

   If you previously set a tracking area, the camera's pan and tilt measurements for that tracking area appear on the screen. Otherwise, the pan and tilt measurements for the default tracking area appear.

5. To change the current tracking area, press **Start**.

6. Follow the directions on the screen, and press **Set**.
7. Continue following the on-screen directions until you have specified the complete camera tracking area.

Calibrating the Camera

The Polycom PowerCam Presenter enables you to calibrate the camera in two ways: calibrate for pointing accuracy and calibrate for background noise.

Calibrating for Pointing Accuracy

If the camera is not accurately pointing to the person wearing the locator pack assembly, you can calibrate the camera.

To calibrate the camera for pointing accuracy:

1. Press **Menu** on the remote control.
2. Select **Camera Calibration** from the PowerCam Presenter screen.
3. Follow the directions on the screen, and press **Begin Calibration**.

   Be sure to keep the locator in the center of the video window while the camera is being calibrated.

   When the system is done, a message appears letting you know if the calibration succeeded or failed. If the calibration failed, you may want to repeat step 3 again.

Calibrating for Background Noise

The system automatically calibrates the camera for microphone background noise when the controller powers up or is rebooted. If the locator pack is powered on when the system needs to calibrate for background noise, the message Turn off locator pack for calibration appears on the screen.

To enable the system to automatically calibrate the camera for background noise:

- Slide the **Power** button on the locator pack to the OFF position.

  When the system is done calibrating, the message Calibration Complete appears on the screen. You may then power on the locator pack.

Configuring LAN Properties

If you want to connect the PowerCam Presenter to the LAN, you must configure the LAN properties. Note that you cannot use the LAN connection to make video calls or view web pages.

To configure the LAN properties:

1. Press **Menu** on the remote control.
2. Select **LAN Properties** from the PowerCam Presenter screen.
3. Configure these settings:

Setting	Description
Host Name	Specifies the system's DNS name. Changing this setting causes the system to restart.
IP Address	Specifies how the system obtains an IP address: • Select **Obtain IP address automatically** if you want the system to get an IP address from the DHCP server on the LAN. • Select **Enter IP address manually** if you do not want the IP address to be assigned automatically. Changing this setting causes the system to restart.
Your IP Address is or **Use the Following IP Address**	If you selected **Obtain IP address automatically**, this field displays the IP address currently assigned to the system. If you selected **Enter IP address manually**, enter the IP address here. Changing this setting causes the system to restart.
Domain Name	Displays the domain name currently assigned to the system. If the system does not automatically obtain a domain name, enter one here.
DNS Servers	Displays the DNS servers currently assigned to the system. If the system does not automatically obtain a DNS server address, enter up to two DNS servers here. Changing this setting causes the system to restart.
Default Gateway	Displays the gateway currently assigned to the system. If the system does not automatically obtain a gateway IP address, enter one here. Changing this setting causes the system to restart.

Setting	Description
Subnet Mask	Displays the subnet mask currently assigned to the system. If the system does not automatically obtain a subnet mask, enter one here. Changing this setting causes the system to restart.
WINS Server	Displays the WINS server currently assigned to the system. If the system does not automatically obtain a WINS server IP address, enter one here. Changing this setting causes the system to restart.
WINS Resolution	Specifies whether to send a request to the WINS server for WINS name resolution.
LAN Speed	Specifies the LAN speed to use. Select **Auto** if you want the network switch to negotiate the speed automatically; otherwise, select either **10 Mbps** or **100 Mbps**. **Note:** Be sure that the **LAN Speed** setting for the PowerCam Presenter and for the switch are the same. Typically, selecting **Auto** for both is sufficient. Polycom recommends that you do not select **Auto** for either just the PowerCam Presenter or just the switch; the settings for both must exactly match. Changing this setting causes the system to restart.
Duplex Mode	Specifies the Duplex Mode to use. Select **Auto** if you want the network switch to negotiate the Duplex Mode automatically; otherwise, select either **Full** or **Half**. **Note:** Be sure that the Duplex Mode you choose is supported by the switch.

Configuring Video Output Settings

The Video Output Settings screen lets you specify the video output signal from connector 1 on the PowerCam Presenter controller.

To configure the video output settings:

1. Press **Menu** on the remote control.
2. Select **Video Output Settings** from the PowerCam Presenter screen.

3. Configure these settings:

Setting	Description
Output 1	Specifies the video output signal from connector 1 on the controller, which can show Polycom Presenter icons and messages: • Select **S-Video** if you connected to an S-video display, VCR, or DVD player, or you connected to the S-video input of another video conferencing system. • Select **Composite** if you connected to a composite display, VCR, or DVD player, or you connected to the composite input of another video conferencing system.
Output 2	Specifies the video output signal from connector 2 on the controller, which cannot show Polycom Presenter icons and messages: • Select **S-Video** if you connected to an S-video display, VCR, or DVD player, or you connected to the S-video input of another video conferencing system. • Select **Composite** if you connected to a composite display, VCR, or DVD player, or you connected to the composite input of another video conferencing system.
Display messages on-screen	Specifies that messages will appear on the display connected to connector 1 on the controller.

Using Automatic Camera Tracking

Automatic camera tracking automatically points the camera to the person who is wearing the locator pack assembly. The camera smoothly follows the person as they move about the room, and automatically zooms in and out as the person gets closer or further away from the camera.

In addition, you can customize automatic camera tracking so that it suits your particular environment. For example, you can turn off automatic zooming and you can customize your automatic camera view (called the Presenter View).

Enabling and Disabling Automatic Camera Tracking

Most of the time, you'll want to keep automatic tracking on so you can freely move about the room without having to manually adjust the camera. However, at times, you may want to manually pan, tilt, and zoom the camera. The Polycom PowerCam Presenter gives you the flexibility to enable or disable automatic camera tracking.

For information about how to manually control the camera, refer to Controlling the Camera Manually on 2-15.

To enable automatic camera tracking:

1. Slide the **Power** button on the locator pack to the ON position.

   The camera remains in the state it was when you last powered off the locator pack. Therefore, if automatic camera tracking was disabled the last time you powered off the locator pack, it will be disabled when you power on the locator pack; if automatic camera tracking was enabled, then it will already be enabled when you power on the locator pack.

2. If automatic camera tracking is disabled, press any of the Presenter View buttons.

To disable automatic camera tracking:

➢ Do one of the following:

- Power off the locator pack by sliding the **Power** button on the top of the locator pack to the OFF position.
- Press **Off** on the remote control.
- Press **Preset 1** or **Preset 2** on the remote control.

If you are using a VSX video conferencing system with your PowerCam Presenter, automatic camera tracking automatically becomes disabled if the far site controls your camera using Far End Camera Control. You can also disable it by doing one of the following:

- Manually pan, tilt, or zoom the camera or select a preset using either the VSX remote control or VSX Web.
- Use VSX automatic tracking to voice.

Setting and Using Presenter Views

A Presenter View is a customized automatic camera tracking view.

You might want to set a Presenter View for situations such as these:

- You want to show the presenter's facial expressions or you want to eliminate distracting background objects from the camera view.

  By using the Tight Presenter View, you can zoom in more closely on the presenter's face, while also eliminating some of the background.

- You want to show three or more people, you want to show a room view, or the presenter plans to walk around during the presentation.

  By using the Wide Presenter View, you can zoom out, thereby enabling additional people, the whole room, or a presenter that is moving around the room to fit in the camera view.

- You want to show two presenters or you want to show a single presenter along with slides, a whiteboard, flip chart, or another object.

  By using the Left or Right Presenter Views, you can set automatic camera tracking so that the presenter appears to the left or right of the camera view (rather than the center), thereby enabling an additional person or object to fit alongside the presenter in the camera view.

Keep these two important points in mind when setting Presenter Views:

- The Presenter View settings described above are merely guidelines: you can set and change the Presenter View buttons to best suit your situation. For example, if you do not need to zoom in on the presenter's face, but you want two different wide room views, you could set the Tight Presenter View to a fairly wide room view, and then set the Wide Presenter View to the widest room view. In other words, set the buttons to whatever you need.

- When you set a Presenter View, the Polycom PowerCam Presenter saves the auto zoom and framing settings for that Presenter View. If you then enable or disable automatic zooming or manually change the camera's pan, tilt, or zoom, the PowerCam Presenter will not automatically save those changes when you disable automatic camera tracking. Instead, when you enable automatic camera tracking again, the PowerCam Presenter will default to the settings you saved for the selected Presenter View.

To set or change a Presenter View:

1. If automatic camera tracking is disabled, enable it as described in the previous section, Enabling and Disabling Automatic Camera Tracking on page 2-11.

2. Do one of the following:
   - If you are planning to enable automatic zooming for the Presenter View, stand 20 feet (6 meters) to 30 feet (9 meters) from the camera. (If your room is smaller, you may have to stand closer.)
   - If you are not planning to enable automatic zooming for the Presenter View, stand at the distance at which that Presenter View will be used. For example, if you are going to use the Left Presenter View when the presenter is standing near the whiteboard, then stand near the whiteboard when setting that Presenter View.
3. Use **Left,** **Right,** **Up,** **Down**, or **Zoom** to adjust the camera to the position you want for the particular Presenter View button.
4. Press **Auto Zoom** if you want to enable automatic zooming for the Presenter View. (This setting is disabled by default.)

   Polycom recommends that you enable automatic zooming for the Presenter View under these conditions:
   - You are going to set the Wide Presenter View.
   - Your distance from the camera is going to vary more than 5 feet (1½ meters). For example, if you plan on standing about 8 feet (2 meters) to 12 feet (4 meters) from the camera during your entire presentation, you do not need to enable automatic zooming (although you may still enable it if you wish). If, on the other hand, you expect to walk anywhere from 4 feet (1 meter) to 30 feet (9 meters) from the camera during your presentation, you should definitely enable automatic zooming.
5. Press and hold the Presenter View button that corresponds to the camera's current position. For example, you can press **Tight** if you have set the camera so that it's zoomed in closely on the presenter.

   Hold the button for at least five seconds or, if you have your video output connected to connector 1 on the Polycom Presenter controller, until the following icon appears on the screen:

   This icon remains on the screen for three seconds.
6. Repeat steps 2 through 5 for each Presenter View button that you want to set or change.

To use a Presenter View:

➢ Press one of the Presenter View buttons:

- **Tight** zooms in more closely on the presenter.
- **Wide** zooms out further away from the presenter.
- **Left** moves the camera to the left of the presenter.
- **Right** moves the camera to the right of the presenter.

Remember that these settings are merely guidelines, and that you can set and change the Presenter View buttons to whatever you need.

Enabling and Disabling Automatic Zooming

When you use automatic camera tracking, you typically want the camera to automatically zoom in and out on the presenter. At other times, however, you may want a fixed zoom so that the zoom remains the same whether the presenter moves closer to or away from the camera. In such cases, you can disable automatic zooming.

To enable and disable automatic zooming:

➢ Press **Auto Zoom** on the remote control.

If automatic zooming was enabled, it becomes disabled; if it was disabled, it becomes enabled. The message Auto zoom is ON or Auto zoom is OFF momentarily appears on the screen to let you know whether automatic zooming is enabled or disabled.

Note

If the camera does not accurately frame the presenter when automatically zooming, you may need to calibrate the camera or adjust the framing. For more information, refer to the "The camera is not accurately framing you" symptom on page 3-6.

Controlling the Camera Manually

If you do not want to use automatic camera tracking, you can manually pan, tilt, and zoom the camera. You can manually adjust the camera at any time: it does not matter whether the locator pack is powered on or powered off.

To control the camera manually:

1. Press **Off** on the remote control.
2. Manually adjust the camera by pressing **Left,** **Right,** **Up,** **Down,** **Zoom,** **Preset 1**, or **Preset 2**.

Setting and Using Camera Presets

Camera presets are stored camera positions. Presets allow you to automatically point the camera at pre-defined locations in a room.

You can set up to two presets.

To set or change a camera preset:

1. If automatic camera tracking is enabled, disable it by pressing **Off** on the remote control.
2. Adjust the camera to the position to want:
   - Press **Left,** **Right,** **Up**, or **Down** to move the camera left, right, up, or down.
   - Press **Zoom In** or **Zoom Out** to zoom the camera in or out.
3. Press and hold **Preset 1** to store the camera's position as Preset 1 or press and hold **Preset 2** to store the camera's position as Preset 2.

   Hold the button for at least five seconds or, if you have your video output connected to connector 1 on the Polycom Presenter controller, until the following icon appears on the screen:

   Any preset that was already stored at Preset 1 or Preset 2 is updated to the new preset position.

To use a camera preset:

➢ Press **Preset 1** or **Preset 2** on the remote control to move the camera to the position you stored for that preset.

If automatic camera tracking is on, it will turn off when you press **Preset 1** or **Preset 2**.

Obtaining System Information

The System Information screen provides you with specific details about your Polycom PowerCam Presenter.

To obtain system information:

1. Press **Menu** on the remote control.
2. Select the **System** button at the bottom of the screen.

   The System Information screen lists:

   – System name
   – Model
   – Serial number
   – IP address
   – Software version
   – MAC address
   – Boot UI version
   – Remote control battery weak indicator (if the battery is weak)

Tips on Using the Polycom PowerCam Presenter

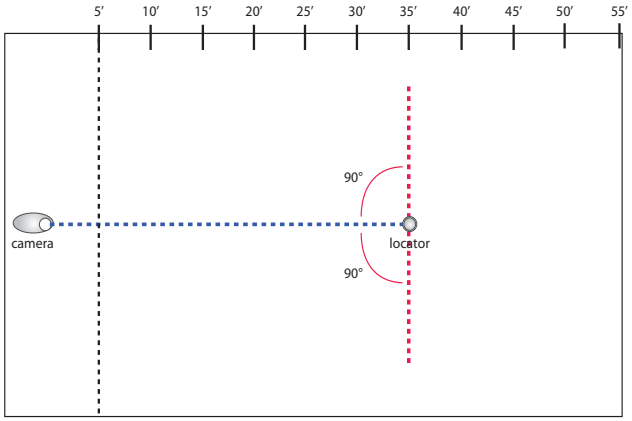
Follow these tips to get the best results when using PowerCam Presenter:

- Do not use the locator pack when the batteries are weak. The System Information screen shows a remote control battery weak indicator if the batteries are weak. For information on how to recharge the batteries, refer to Charging the Locator Pack Batteries on page 3-1.

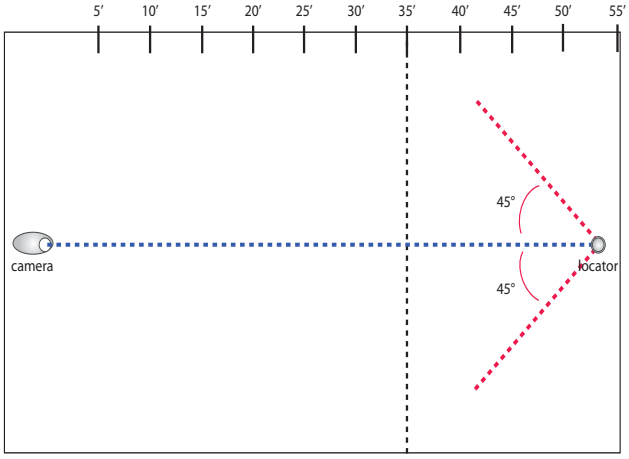
- Place the camera so that:
  - It is no more than 50 feet (15 meters) and no closer than 5 feet (1½ meters) from the person wearing the locator pack assembly.
  - It is about 6 feet to 7 feet (2 meters) above the floor, although higher will also work.
  - The back of the camera is at least 1 foot (½ meter) away from the wall. If you add acoustic foam on the wall, you can place the camera slightly closer than 1 foot (½ meter) from the wall.
  - The head of the camera points no more than 25 degrees above or below the camera base when it is tracking the person wearing the locator. Plus or minus 25 degrees of tilt is the mechanical limit of the camera.
- Remove as many obstructions as possible between the locator pack assembly and the camera. Line-of-sight is best.
- Face toward the camera when wearing the locator pack assembly. If you walk behind an obstruction or turn your back for a time and the system loses the ultrasound signal, move the locator pack assembly back in the line-of-sight of the camera. The camera will automatically receive the signal again and point toward you.

  For best results, follow these guidelines:

  - From 5 feet (1½ meters) to 35 feet (11 meters) away from the camera, you can face the camera or turn side-to-side as long as the locator faces no more than 90° away from the center of the camera.



– From greater than 35 feet (11 meters) away from the camera, you can face the camera or turn slightly from side-to-side as long as the locator faces no more than 45° away from the center of the camera.



Note that if you are within the range above and you turn your back briefly, the camera will receive the signal and point toward you when you face the camera again.

- If the camera is not accurately pointing at the person wearing the locator pack assembly, see the suggestions on pages 3-7 and 3-8 for solving this problem.
- The camera cannot receive signals from two locator pack assemblies at the same time. Always use just one at a time.

3

Maintenance and Troubleshooting

This chapter contains maintenance information for your Polycom PowerCam Presenter, including how and when to charge the locator pack batteries, how to upgrade the software, and what the automatic camera tracking specifications are.

This chapter also presents problems, likely causes, and corrective actions for the system. If you have referred to this documentation and you still are unable to resolve your issue, contact Polycom Technical Support. The last section of this chapter tells you how to do so.

Maintaining the System

This section describes how and when to charge the locator pack batteries, provides software upgrade instructions, and lists the automatic camera tracking specifications.

Charging the Locator Pack Batteries

Caution

Battery safety is important. Please read and understand the safety precautions for lithium ion battery packs on page Safety and Regulatory Notices-1 before using or handling the locator pack batteries.

Before using the locator pack, you must charge the battery pack inside the locator for three hours. Whenever you charge the locator batteries, you must power off the locator pack.

For your convenience, you do not have to remove the battery pack from the locator pack to charge it. Simply do the following:

1. Power off the locator pack.
2. Connect the locator pack AC power charger and cord to each other.
3. Connect the AC power charger to the locator pack.
4. Connect the power cord to a wall outlet (100 to 240 VAC).

When the battery pack is charging, the battery LED on the top of the locator pack lights up red. After about three hours, the battery pack will be fully charged and the battery LED will change to green.

The battery pack lasts for about 8 hours. When it needs to be recharged, the operating LED on the top of the locator pack begins to blink red (normally, it blinks green when powered on).

Upgrading the Software

To upgrade the PowerCam Presenter software, you need the Softupdate application. You may be able to get this application on CD-ROM from your reseller or from the Polycom web site. In either case, you must connect a Windows® computer with network connectivity to the controller.

Caution

Do not power off the system during the software upgrade process. If the upgrade is interrupted, the system may become unusable.

To upgrade your software:

1. If you need to access the Softupdate application on the web:
   a. Using a web browser, go to www.polycom.com/videosoftware and log in to the Polycom Resource Center.

      You will need to set up a PRC account, if you don't already have one.

   b. Navigate to your product page.

      Refer to the *Polycom PowerCam Presenter Release Notes* for information about the latest software version. Refer to the *Upgrading Polycom Video Software* document for detailed information about using the Softupdate program.

   c. Download the PowerCam Presenter software update file in .zip format.

   d. Double-click the **software.zip** file to extract the file.
2. Double-click **Softupdate.exe** to run the program and upgrade the software.

Automatic Camera Tracking Specifications

To obtain optimum performance from the camera, please refer to the "Setting up the Camera" section of the *Setting up the Polycom PowerCam Presenter* document, which you received with your system. This document is also available at www.polycom.com/videodocumentation.

The following table lists additional automatic camera tracking specifications for the camera:

Specification	Description
Room size	50 feet by 50 feet (15 meters) or smaller
Coverage angle (the angular range away from the center point that the camera can track to)	Pan: +45°, -45° Tilt: +9°, -30°
Pan and tilt accuracy	+ or -1° at 50 feet (15 meters)
Zoom accuracy	When the person wearing the locator pack assembly remains within 40 feet (12 meters) from the camera, the camera automatically adjusts the zoom to keep the person framed in approximately the same way no matter where the person is in that range. Within 40 feet (12 meters) to 50 feet (15 meters), the camera will not automatically change the zoom setting.
Ability to stay on target	The camera stays locked onto the person wearing the locator pack assembly if: • The locator has a direct line of sight to the camera. • The person wearing the locator is facing within 45° of the camera. If the person faces more than 45° from the camera, the camera will still likely stay on target. The closer the person is to the camera, the more likely it is the camera will stay on target. • The locator is at least 2 feet (½ meter) from obstructions like a wall, monitor, table, or floor.
Smoothness and quickness	When the person wearing the locator pack assembly moves around a little, but still stays within the camera view, the camera does not move. This prevents unnecessary jitter in the camera position. When the person stops moving, the camera comes to rest pointing at the person within two seconds. When the person moves outside of the “anti-jitter frame”, the camera starts moving within 500 ms.

Troubleshooting the System

The following tables lists some common power, hardware, and camera movement problems and the steps you can take to resolve them.

Power and Hardware Issues

Symptom	Problem	Corrective Action
The system does not start or respond in any way	Not all of the power switches are on.	To power on the system: **1.** Press the power button located on the front of the PowerCam Presenter controller. **2.** If you have a VSX video conferencing system, press the power button located on the front of the VSX system. **3.** Wait 90 seconds and then slide the power button located on the top of the locator pack to the ON position.
	Not all of the power cables are connected.	Make sure the following power cables are connected to a power outlet, and that the cables are seated securely both in the outlet and in the system equipment: • Controller power cable • Camera power cables • VSX system power cables (if your PowerCam Presenter system is configured with a VSX)
	The power outlet is not active, or one of the system's power cables is not operating properly.	Check the power outlet by unplugging the equipment and plugging in a lamp, radio, or other small appliance. If it does not operate, the outlet is not active — connect the equipment to a different outlet. If the outlet is active, the problem is in the power cable. In this case, call Polycom Technical Support.
The system does not respond to the remote control	Low, dead, or missing batteries in the remote control.	Install three AAA batteries in the remote control.
	The batteries are installed incorrectly in the remote control.	Insert the batteries in the correct +/- position.
	The IR receiver in the camera is not receiving signals from the remote control.	Make sure you are pointing the remote control at the IR receiver, which is located in the camera.

Symptom	Problem	Corrective Action
The system does not respond to the remote control (cont.)	Camera inputs and outputs are not connected correctly.	Refer to the *Setting up the Polycom PowerCam Presenter* document, which you received with your system, for information on how to connect the camera correctly. This document is also available at www.polycom.com/videodocumentation.
No video or blue video screen from the camera.	Camera inputs and outputs are not connected correctly.	Refer to the *Setting up the Polycom PowerCam Presenter* document, which you received with your system, for information on how to connect the camera correctly. This document is also available at www.polycom.com/videodocumentation.
	You connected the controller to the camera's composite video output, but the camera's input signal is set to **S-Video**.	Do the following: **1.** Press **Menu** on the remote control. **2.** Select **Camera Settings** from the PowerCam Presenter screen. **3.** Set the **Input Signal** to **Composite**.
	You connected the controller to the camera's S-video output, but the camera's input signal is set to **Composite**.	Do the following: **1.** Press **Menu** on the remote control. **2.** Select **Camera Settings** from the PowerCam Presenter screen. **3.** Set the **Input Signal** to **S-Video**.
No video from the controller.	The controller and display are not connected correctly.	Do the following: **1.** Connect the display to connector 1 on the controller. **2.** Press **Menu** on the remote control. — If you do see video on the display, follow the steps listed in the "No video or blue video screen from the camera" symptom above. — If you do not see video on the display, make sure the video cable is connected properly and that the display has the corresponding input selected.
Poor audio from a lapel or lavaliere microphone	You are wearing a lapel or lavaliere microphone, and the locator is interfering with the sound from the microphone.	Separate the lapel or lavaliere microphone and the locator on your body until the audio sounds normal. Typically, the sound will be clear within 4 inches (10 cm) of separation, but this varies depending on the microphone.
Video and audio are not synchronized	The cables are not connected incorrectly.	Refer to the *Setting up the Polycom PowerCam Presenter* document, which you received with your system, for information on how to connect the cables correctly. This document is also available at www.polycom.com/videodocumentation.

Camera Movement Issues

Symptom	Problem	Corrective Action
The camera moves slowly	You connected or powered on the camera after the controller was already powered on.	Do the following: **1.** Power off the controller and the camera. **2.** Power on the camera. **3.** Power on the controller.
	This is normal system behavior.	At times, the camera may pan, tilt, or zoom somewhat slowly. Do the following to rule out any problems: **1.** Restart the controller. **2.** Check the "Automatic camera tracking does not properly follow you" symptom on page 3-7 and 3-8 to make sure that none of the problems listed there are contributing to the slow camera movement. If none of these problems pertain to your situation, then the camera is behaving normally.
The camera is not accurately framing you	The camera calibration and framing need adjustment.	Do the following: **1.** Calibrate the camera as described in Calibrating for Pointing Accuracy on page 2-7. **2.** Make sure that automatic camera tracking is enabled as described in Enabling and Disabling Automatic Camera Tracking on page 2-11. **3.** Stand 20 feet (6 meters) to 30 feet (9 meters) from the camera. (If your room in smaller, you may have to stand closer.) **4.** Press **Left,** **Right,** **Up,** **Down,** or **Zoom** to adjust the camera framing. **5.** Press **Auto Zoom** to enable automatic zooming.
The following icon appears on the screen: 	The ultrasound signal has been lost. Even though automatic tracking is enabled, the camera is not receiving the ultrasound signal, so it cannot track you. This icon appears momentarily when the signal is first lost, and it appears again momentarily if you press a Presenter View button when the signal is not present.	Do the following: • Face the camera more directly instead of at an angle, and make sure that the locator is pointing straight ahead, not to one side or up or down. For guidelines regarding facing the camera, see page 2-17. • Make sure that the power button on the top of the locator pack is in the ON position and that the batteries in the locator pack are charged. • Try standing closer to the camera. • Wait until the camera receives the signal again; when this occurs, the camera will point to the locator. • Press a button on the remote, such as the **Off** button, that enables you to control the camera manually.

Symptom	Problem	Corrective Action
Automatic camera tracking does not properly follow you	Camera inputs and outputs are not connected correctly.	Refer to the *Setting up the Polycom PowerCam Presenter* document, which you received with your system, for information on how to connect the camera correctly. This document is also available at www.polycom.com/videodocumentation. If you find that the camera is not connected correctly: **1.** Power off the controller, the VSX video conferencing system (if any), the locator pack, and the camera. **2.** Connect the camera correctly, and then power it on. **3.** Power on the controller and the VSX video conferencing system (if any). **4.** Wait 90 seconds and then power on the locator pack.
	The camera is not calibrated.	Calibrate the camera as described in Calibrating for Pointing Accuracy on page 2-7.
	The locator pack is not powered on or there is a low, dead, or missing battery pack in the locator pack.	Make sure that the power button on the top of the locator pack is in the ON position and that the battery pack is correctly installed and charged. For information about charging the battery pack, refer to Charging the Locator Pack Batteries on page 3-1.
	The camera is not placed properly.	Place the camera so that: • It is about 6 feet to 7 feet (2 meters) above the floor, although higher will also work. • The back of the camera is at least 1 foot (½ meter) away from the wall. If you add acoustic foam on the wall, you can place the camera slightly closer than 1 foot (½ meter) from the wall. • The head of the camera points no more than 25° above or below the camera base when it is tracking the person wearing the locator pack assembly. Plus or minus 25° of tilt is the mechanical limit of the camera.

Symptom	Problem	Corrective Action
Automatic camera tracking does not properly follow you (cont.)	There is an obstruction between you and the camera.	Remove objects, such as furniture, plants, and so on, that obstruct the line-of-sight between the camera and the locator.
	You are too close or too far from the camera.	Stay within 5 feet (1½ meters) to 50 feet (15 meters) of the camera.
	The Tracking Area setting is set to **Restricted** or **Unrestricted**, but you are not in the tracking area.	When the Tracking Area setting is set to **Restricted** or **Unrestricted**, stay within the tracking area; otherwise, the camera will not track you. For more information about configuring the tracking area, refer to Configuring the Camera Tracking Area on page 2-4.
	There are many reflective surfaces, such as windows or large plasma screens, in the room.	To change the reflective paths, try any of the following: • Move the camera to another location in the room. • Try to avoid the part of the room where the camera tracking has difficulty locating you. • Remove or cover some of the reflective surfaces. • Change the Tracking Area setting. For information about how to do this and why you might want to change the setting, refer to Configuring the Camera Tracking Area on page 2-4.
	You are facing away from the camera or the locator itself is not facing forward.	Check that the locator is facing forward, not to the side or up or down. If the locator is positioned correctly, then make sure you face towards the camera as much as possible. For guidelines regarding facing the camera, see page 2-17.
When automatic camera tracking is enabled, the last used pan, tilt, zoom and auto zoom settings are not saved	This is normal system behavior.	When you set a Presenter View, the Polycom PowerCam Presenter saves the auto zoom and framing settings for that Presenter View. If you then enable or disable automatic zooming or manually change the camera's pan, tilt, or zoom, the PowerCam Presenter will not automatically save those changes when you disable automatic camera tracking. Instead, when you enable automatic camera tracking again, the PowerCam Presenter will default to the settings you saved for the selected Presenter View.
The camera goes to sleep whenever the VSX system goes to sleep	The screen saver wait time on the VSX video conferencing system connected to your Polycom PowerCam Controller is not set to **Off**.	Use the VSX remote control to do the following on the VSX system: 1. Go to **System** > **Admin Settings** > **General Settings** > **System Settings** > **Appearance**. 2. Set **Screen Saver Wait Time** to **Off**.

Symptom	Problem	Corrective Action
The VSX system Automatic Camera Tracking and Automatic Camera Tracking to Presets features do not work consistently or correctly	The VSX system Automatic Camera Tracking and Automatic Camera Tracking to Presets features do not work when the PowerCam Presenter automatic camera tracking feature is enabled.	Disable Automatic Camera Tracking and Automatic Camera Tracking to Presets on the VSX whenever you use automatic camera tracking on the PowerCam Presenter.

Contacting Technical Support

To contact Polycom Technical Support, go to www.polycom.com/support. You can enter information about your system and ask a question or describe your problem.

Safety and Regulatory Notices

Important Safeguards
Read and understand the following instructions before using the system: • Battery safety is important. Please read and understand the Safety Precautions for Lithium Ion Battery Packs listed in the following table before using the Polycom PowerCam Presenter. • Close supervision is necessary when the system is used by or near children. Do not leave unattended while in use. • Only use electrical extension cords with a current rating at least equal to that of the system. • Always disconnect the system from power before cleaning and servicing and when not in use. • Do not spray liquids directly onto the system when cleaning. Always apply the liquid first to a static free cloth. • Do not immerse the system in any liquid or place any liquids on it. • Do not disassemble this system. To reduce the risk of shock and to maintain the warranty on the system, a qualified technician must perform service or repair work. • Connect this appliance to a grounded outlet. • Only connect the system to surge protected power outlets. • Keep ventilation openings free of any obstructions. SAVE THESE INSTRUCTIONS.

Safety Precautions for Lithium Ion Battery Packs
CAUTION Risk of explosion if battery is replaced by incorrect type. Use only the batteries provided by Polycom. Replacement batteries can be obtained from Polycom, Inc. Please quote the part number of your existing battery when ordering a replacement. Dispose of used batteries according to instructions.
Charging Polycom's locator operates on a rechargeable lithium ion battery. The battery needs to be recharged periodically. Use the supplied charger to recharge the battery while it is installed in the locator pack. Unlike a laptop PC or mobile phone, the locator pack should not be used while charged. The battery cannot be recharged outside the locator pack.
Replacement by an incorrect type could result in an explosion.

Safety Precautions for Lithium Ion Battery Packs

WARNING

This product contains a lithium ion rechargeable battery pack. To reduce the risk of fire or burns, do not disassemble, crush, puncture, short external contacts, or dispose of in fire or water.

CAUTION

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Dispose of used batteries according to the manufacturer's instructions.

Follow local regulations regarding the safe disposal of the battery. Your vendor can advise you on local regulations, and/or the existence of any battery disposal programs in operation.

Safety Warnings When Using the Battery

WARNING

1. Misusing the battery may cause the battery to get hot, rupture, or ignite and cause serious injury. Be sure to follow the safety rules listed below:
   - Do not place the battery in fire or heat the battery.
   - Do not install the battery backwards so that the polarity is reversed.
   - Do not connect the positive terminal and the negative terminal of the battery to each other with any metal object (such as wire).
   - Do not pierce the battery with nails, strike the battery with a hammer, step on the battery, or otherwise subject it to strong impacts or shocks.
   - Do not solder directly onto the battery.
   - Do not expose the battery to water or salt water, or allow the battery to get wet.
2. Do not disassemble or modify the battery. The battery contains safety and protection devices which, if damaged, may cause the battery to generate heat, rupture, or ignite.
3. Do not place the battery on or near fires, stoves, or other high-temperature locations. Do not place the battery in direct sunshine, or use or store the battery inside cars in hot weather. Doing so may cause the battery to generate heat, rupture or ignite. Using the battery in this manner may also result in a loss of performance and shortened life expectancy.

CAUTION

1. Immediately discontinue use of the battery if, while using, charging, or storing the battery, the battery emits an unusual smell, feels hot, changes color, changes shape, or appears abnormal in any other way. Contact your sales location or Polycom if any of these problems are observed.
2. Do not place the batteries in microwave oven, high-pressure containers, or induction cookware.
3. In the event that the battery leaks and the fluid gets into one's eyes, do not rub the eye. Rinse well with water and immediately seek medical care. If left untreated, the battery fluid could cause damage to the eye.

Safety Precautions for Lithium Ion Battery Packs
Safety Warnings When Charging the Battery
WARNING **1.** Be sure to follow the rules listed below while charging the battery. Failure to do so may cause the battery to become hot, rupture, or ignite and cause serious injury. • When charging the battery, either use a specified battery charger or otherwise ensure that the battery charging conditions specified by Polycom are met. • Do not attach the batteries to a power supply plug or directly to a car's cigarette lighter. • Do not place the batteries in or near fire, or into direct sunlight. When the battery becomes hot, the built-in safety equipment is activated, preventing the battery from charging further, and heating the battery can destroy the safety equipment and can cause additional heating, breaking, or ignition of the battery. **2.** Do not continue charging the battery if it does not recharge within the specified charging time. Doing so may cause the battery to become hot, rupture, or ignite.
CAUTION The temperature range over which the battery can be charged in 0ºC to 45ºC. Charging the battery at temperatures outside of this range may cause the battery to become hot or to break. Charging the battery outside of this temperature range may also harm the performance of the battery or reduce the battery's life expectancy.
Safety Warnings When Discharging the Battery
WARNING Do not discharge the battery using any device except for the specified device. When the battery is used in devices aside from the specified device it may damage the performance of the battery or reduce its life expectancy, and if the device causes an abnormal current to flow, it may cause the battery to become hot, rupture, or ignite and cause serious injury.
CAUTION The temperature range over which the battery can be discharged is 10º to 45ºC. Use of the battery outside this temperature range may damage the performance of the battery or may reduce its life expectancy.

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WARNING This is a Class A product. In a domestic environment, this product may cause radio interference in which case the user may be required to take adequate measures.
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The system can accept AC voltages between 98 and 250 VAC, 7A 50-60 Hz.
Industry Canada (IC) This Class [A] digital apparatus complies with Canadian ICES-003. Cet appareil numerique de la Classe [A] est conforme à la norme NMB-003 du Canada. The Industry Canada label identifies certified equipment. This certification means that the equipment meets telecommunications network protective, operational and safety requirements as prescribed in the appropriate Terminal Equipment Technical Requirements document(s). The Department does not guarantee the equipment will operate to the user's satisfaction.
EEA Regulatory Notices **CE Mark R & TTE Directive** This Polycom PowerCam Presenter has been marked with the CE mark. This mark indicates compliance with EEC Directives 89/336/EEC, 73/23/EEC 1999/5/EC. A full copy of the Declaration of Conformity can be obtained from Polycom Ltd., 270 Bath Road, Slough UK SL1 4DX.
Declaration of Conformity: Hereby, Polycom Ltd. declares that this Polycom PowerCam Presenter is in compliance with the essential requirements and other relevant provisions of Directive 1999/5/EC.
Konformitetserklæring: Hermed erklærer Polycom Ltd., at indestående Polycom PowerCam Presenter er i overensstemmelse med de grundlæggende krav og de relevante punkter i direktiv 1999/5/EF.

Regulatory Notices

Konformitätserklärung:

Hiermit erklärt Polycom Ltd., dass der Polycom PowerCam Presenter die grundlegenden Anforderungen und sonstige maßgebliche Bestimmungen der Richtlinie 1999/5/EG erfüllt.

Δήλωση Συμμόρφωσης:
Δια του παρόντος, η εταιρεία Polycom Ltd. δηλώνει ότι η παρούσα συσκευή (δρομολογητής) V500; πληροί τις βασικές απαιτήσεις και άλλες βασικές προϋποθέσεις της Οδηγίας 1999/5/ΕΚ.

Vaatimustenmukaisuusvakuutus:

Polycom Ltd. vakuuttaa täten, että Polycom PowerCam Presenter on direktiivin 1999/5/EC keskeisten vaatimusten ja sen muiden tätä koskevien säännösten mukainen.

Déclaration de conformité:

Par la présente, Polycom Ltd. déclare que ce Polycom PowerCam Presenter est conforme aux conditions essentielles et à toute autre modalité pertinente de la Directive 1999/5/CE.

Dichiarazione di conformità:

Con la presente Polycom Ltd. dichiara che il Polycom PowerCam Presenter soddisfa i requisiti essenziali e le altre disposizioni pertinenti della direttiva 1999/5/CE.

Verklaring van overeenstemming:

Hierbij verklaart Polycom Ltd. dat diens Polycom PowerCam Presenter voldoet aan de basisvereisten en andere relevante voorwaarden van EG-richtlijn 1999/5/EG.

Declaração de Conformidade:

Através da presente, a Polycom Ltd. declara que este Polycom PowerCam Presenter se encontra em conformidade com os requisitos essenciais e outras disposições relevantes da Directiva 1999/5/CE.

Declaración de conformidad:

Por la presente declaración, Polycom Ltd. declara que este Polycom PowerCam Presenter cumple los requisitos esenciales y otras cláusulas importantes de la directiva 1999/5/CE.

Överensstämmelseförklaring:

Polycom Ltd. förklarar härmed att denna Polycom PowerCam Presenter överensstämmer med de väsentliga kraven och övriga relevanta stadganden i direktiv 1999/5/EG.

CE Mark LVD and EMC Directive

This system has been marked with the CE mark. This mark indicates compliance with EEC Directives 89/336/EEC and 73/23/EEC. A full copy of the Declaration of Conformity can be obtained from Polycom Ltd., 270 Bath Road, Slough UK SL1 4DX, UK.

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Regulatory Notices

声　明

此为 A 级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取切实可行的措施。

Special Safety Instructions

Follow existing safety instructions and observe all safeguards as directed.

Installation Instructions

Installation must be performed in accordance with all relevant national wiring rules.

Plug Acts as Disconnect Device

The socket outlet to which this apparatus is connected must be installed near the equipment and must always be readily accessible.

Index

A

adapter
  male RCA to female S-video 1-4
  S-video gender changer 1-4
  S-video to RCA 1-4
audio, from lapel or lavaliere microphone 3-5
automatic camera tracking
  calibrating for pointing accuracy 2-7
  configuring tracking area 2-4
  controlling camera manually 2-15
  enabling and disabling 2-11
  enabling and disabling automatic zooming 2-14
  lost ultrasound signal 3-6
  setting and using Presenter Views 2-12
  specifications for 3-2
  troubleshooting 3-7, 3-8
  using 2-10
automatic zooming
  enabling and disabling 2-14
  saving settings 2-12
  setting with Presenter View 2-13
  when to use 2-13

B

background noise, calibrating for 2-7
backlight compensation 2-3
batteries
  charging for locator pack 3-1
  description of locator battery pack 1-2
  safety precautions Safety and Regulatory Notices-1
  troubleshooting for locator pack 3-7
  troubleshooting for remote control 3-4
belt clip, description of 1-2
blue screen, troubleshooting 3-5
boot UI version 2-16

C

cable
  camera 1-3
  camera adapter 1-3
  camera power 1-3
  connecting 2-1
  controller power 1-3
  LAN 1-3
  locator pack AC power 1-2
  S-video 1-4
calibrating
  for background noise 2-7
  for pointing accuracy 2-7
  troubleshooting 3-6, 3-7
camera
  adapter cable 1-3
  automatic camera tracking specifications 3-2
  backlight compensation 2-4
  cables 1-3
  calibrating 2-7
  configuring settings 2-3
  configuring tracking area 2-4
  controlling manually 2-15
  description of 1-3
  direction 2-4
  enabling and disabling automatic camera tracking 2-11
  enabling and disabling automatic zooming 2-14
  input signal 2-4
  moving slowly 3-6
  no video 3-5
  placement of 2-17, 3-7
  power supply and power cable 1-3
  setting and using Presenter Views 2-12
  setting and using presets 2-15
  troubleshooting automatic camera tracking 3-7, 3-8
  using automatic camera tracking 2-10
Camera Setting screen 2-3
components
  optional 1-5
  standard 1-2

composite video 2-2, 3-5
controller power cable 1-3
controller, description of 1-2

D

default gateway 2-8
DNS servers 2-8
documentation, list of 1-5
domain name 2-8
duplex mode 2-9

E

ears, rack mount 1-4
equipment
  optional 1-5
  standard 1-2

F

feet, rubber 1-4
framing
  saving settings 2-12
  troubleshooting 3-6

G

gender changer adapter 1-4

H

hardware
  setting up 2-1
  troubleshooting 3-4
host name 2-8

I

icons, displaying on-screen 2-1
input signal
  setting 2-3
  troubleshooting 3-5
IP address 2-8, 2-16
IR receiver, not receiving signals 3-4

L

LAN
  cable 1-3
  configuring properties for 2-8
  speed 2-9
lanyard, description of 1-2
lapel microphone 3-5
lavaliere microphone 3-5
lip synchronization
  problems with 2-1
  troubleshooting 3-5
locator pack assembly
  AC power charger and cord 1-2
  automatic camera tracking not following 3-7, 3-8
  charging batteries for 3-1
  description of 1-2
  description of locator 1-2
  description of locator pack 1-2
  distance from camera 2-17
  number of 2-18
  placement of 2-17
  troubleshooting 3-7
  weak batteries 2-16

M

MAC address 2-16
messages, displaying on-screen 2-1, 2-10
microphone, poor audio from 3-5
model, of system 2-16

N

noise, calibrating for 2-7
Not Specified tracking area setting 2-5

O

optional equipment 1-5
output 1 and 2 2-10

P

pointing accuracy, calibrating for 2-7
Polycom PowerCam Presenter
  configuring user settings 2-3
  contacting technical support 3-9
  controlling the camera manually 2-15
  introduction to 1-1
  key features 1-6
  maintaining the system 3-1
  obtaining system information 2-16
  safety and regulatory notices Safety and Regulatory Notices-1
  setting and using camera presets 2-15
  setting up hardware 2-1
  system components 1-2
  tips on using 2-16
  troubleshooting the system 3-4
  using automatic camera tracking 2-10
  using the remote control 2-2

Polycom web site
  for documentation 1-4
  for support 3-9
power
  cable for camera 1-3
  controller power cable 1-3
  locator pack AC power charger and cord 1-2
  powering on the system 3-4
  troubleshooting 3-4
PowerCam
  See camera
PowerCam Presenter
  See Polycom PowerCam Presenter
Presenter
  See Polycom PowerCam Presenter
Presenter View
  buttons 2-14
  setting and using 2-12
presets, setting and using 2-15
problems, solving 3-4

R

rack mount ears 1-4
RCA to S-video adapter 1-4
reflective surfaces
  reducing 2-4
  tracking area setting 2-5
  troubleshooting 3-8
regulatory notices Safety and Regulatory Notices-1
remote control 1-5
  buttons on 2-2
  illustration of 2-2
  replacing batteries 2-3
  troubleshooting 3-4, 3-5
  using 2-2
Restricted tracking area setting 2-5
room size 3-3
rubber feet 1-4

S

safety notices Safety and Regulatory Notices-1
serial number 2-16
settings
  configuring camera settings 2-3
  configuring user settings 2-3
size, of room 3-3
Softupdate application 3-2
software
  upgrading 3-2
  version 2-16
solving problems 3-4
specifications, for automatic camera tracking 3-2
standard equipment 1-2
subnet mask 2-9
support, contacting 3-9
S-video
  cables 1-4
  connecting additional display 2-2
  gender changer adapter 1-4
  to RCA adapter 1-4
System Information screen 2-16
system information, obtaining 2-16
system name 2-16

T

technical support, contacting 3-9
tracking area
  configuring 2-4
  troubleshooting 3-8
Tracking Area screen 2-6
troubleshooting 3-4

U

ultrasound signal, lost 3-6
Unrestricted tracking area setting 2-5
upgrading software 3-2
user settings, configuring 2-3

V

video delay
  cause of 2-1
  troubleshooting 3-5
Video Output Settings screen 2-9
video output, configuring settings for 2-9
video, troubleshooting 3-5
VSX system
  disabling automatic camera tracking 2-11
  going to sleep 3-8
  troubleshooting automatic camera tracking 3-9

W

warranty information Safety and Regulatory Notices-4
web site 1-4, 3-9
WINS resolution 2-9
WINS server 2-9

Z

zooming, enabling and disabling automatic 2-14